Amendments to the Claims:

Listing of Claims:

Claim 1 (previously presented). In a method for producing a hardened and/or hard-sintered, annularly axially symmetrical sintered shaped part based on iron with internal toothing, including undercuts in a tooth flank region and, optionally, functional recesses in the tooth region, wherein the manufacturing sequence includes the steps of powder pressing, sintering, mechanical forming of the undercuts, and hardening, the improvement which comprises:

producing undercuts with open-pored surfaces on the shaped part by milling prior to hardening the shaped part or on a pre-sintered shaped part;

thereby moving a milling cutter axis along a hypocycloid path defined with cusps and contact-cutting the part in a region of the cusps of the hypocycloid path; and

thereby simultaneously rotating the shaped part about an axis of the shaped part.

Claim 2 (previously presented). The method according to claim 1, which comprises powder-pressing to form a pressed part, pre-sintering the pressed part at temperatures of < 900°C, then machining the pre-sintered part by milling, and then fully sintering, and in the process hardening, the part at temperatures of between 1000°C and 1400°C.

Claim 3 (original). The method according to claim 1, which comprises forming the part with an Fe-based alloy containing ≥ 0.2% of C, and effecting the step of fully sintering at temperatures of between 1100°C and 1250°C.

Claim 4 (original). The method according to claim 1, which comprises forming the part with an Fe–based alloy containing ≥ 0.4% of C, and effecting the step of fully sintering at temperatures of between 1100°C and 1250°C.

Claim 5 (original). The method according to claim 1, which comprises hardening the part by rapidly cooling from a sintering temperature during the step of fully sintering.

Claim 6 (original). The method according to claim 1, which comprises forming the part with an Fe-based alloy containing < 0.3% of C, fully sintering the pressed part to form the finished shaped part under standard conditions, then machining the part by milling, and finally hardening the part, at least in a surface zone thereof, by case-hardening in a carbon-containing atmosphere.

Claim 7 (original). The method according to claim 1, which comprises forming the undercuts with a single-tooth milling cutter with an integer ratio between a mill revolution time through one cycloid path and one rotation of the part about the axis thereof.

Claim 8 (previously presented). The method according to claim 1, which comprises milling the part with a milling tool holder equipped with a tool for milling the undercut and with a tool for milling the functional recess.

Claim 9 (canceled).